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PREPARATIONS OF IRON.

Several preparations of iron have lately engaged the attention of the profession, more particularly the citrate, ammonio-citrate, and the lactate, on which we proceed to offer a few remarks.

Citrate of Iron.—The citrate of iron appears to have been first introduced to the notice of the medical profession by M. Béral, of Paris. The process, given by this pharmacien for the preparation of the salt, and which was published in 1841, is as follows:—Take of crystallized citric acid, four ounces; distilled water, four ounces; moist hydrated peroxide of iron, about eight ounces. Weigh the acid and water in a platinum capsule, and apply heat; when the acid is dissolved, and the solution boiling, saturate it with the oxide of iron, adding rather more of the oxide than the acid will dissolve. When cold, filter the solution, and make the quantity sixteen ounces. This solution, spread out on glass, will speedily dry, and separate itself from the glass in thin lamellæ.

The hydrated peroxide of iron may be prepared either from the sulphate or from the sesquioxide of iron. A formula for its preparation from the sulphate is given in the Edinburgh Pharmacopœia. It is prepared from the sesquioxide by dissolving this oxide in hydrochloric acid, and precipitating with ammonia.

The oxide of iron and citric acid combine in the proportions of forty parts of the oxide to seventy of the crystallized acid. In using the moist hydrated oxide, as the degree of moisture will be subject to variation, the oxide should be added in excess.

The salt thus formed is uncrystallizable; it strongly reddens litmus paper, and has an acid, not unpleasant, taste. It is very slowly soluble in cold water; so much so, indeed, as to have led to the supposition of its being insoluble. It dissolves readily in boiling water.

Ammonio-citrate of Iron.—If to the acid citrate of iron in solution, prepared according to the foregoing process, ammonia be added so as to neutralize the excess of acid, a double salt is obtained, which dissolves in cold water much more readily than the citrate, and which, from its neutrality, may in some cases be preferable to the other.

This neutral salt is frequently sold under the name of *citrate of iron*, and having been extensively introduced to the notice of medical men under this appellation, without its real constitution being explained, it is the salt generally referred to, where *citrate of iron* is ordered in prescriptions. Much inconvenience frequently arises from this circumstance, the dispenser being at a loss to know whether he should use the salt which the term *citrate of iron* most correctly represents, namely, the *acid citrate*, or that which is more frequently intended by the prescriber, namely, the *ammonio-citrate;* the latter being imperfectly and improperly described by the term *citrate of iron.* It is very desirable that such a nomenclature should be adopted, in the case of these two salts, as would obviate this confusion; and it is hoped that the publication of the formulæ for both preparations may tend to effect this object.

Lactate of Iron.—The preparation of this salt is effected, according to M. Lourador, by the direct action of a dilute solution of lactic acid on iron filings.

The lactic acid is obtained by the spontaneous fermentation of milk. To eight pints of milk add eight ounces of sugar of milk dissolved in water; leave this mixture, in an open vessel, exposed to the air for several days at a temperature of between 70 and 80 degrees. The liquid being now found very acid, is to be neutralized with bicarbonate of soda; on further exposure this will become again acid, and must be neutralized by the addition of more of the alkali, and the same process repeated until the whole of the sugar of milk has been converted into lactic acid. The liquid is now to be boiled to coagulate the caseum, and the filtered solution carefully evaporated to a syrupy consistence. The product of the evaporation is taken up by alcohol, which dissolves the lactate of soda. Sulphuric acid, added in proper quantity to the alcoholic solution, forms sulphate of soda, which is precipitated, while the lactic acid is retained in solution nearly pure. It may now be obtained by evaporation of the alcohol.

In a weak solution of this acid in water, iron filings are to be digested at a gentle heat for six or seven hours; after this, boil the liquor, filter, and concentrate the solution, until crystals of the salt are afforded on cooling. These crystals are to be put into a funnel, washed with alcohol by displacement, and dried quickly.

This salt, which is a lactate of the protoxide of iron, is generally met with in the form of a yellowish or greenish white powder. It is but little soluble in water; it reddens litmus paper, and has a ferruginous taste. When dissolved in water, the iron passes to a high state of oxidation, and the salt becomes yellow.—*Pharmaceutical Journal.*

From a Correspondent of the Pharmaceutical Journal.—Observing in some of the numbers of your Journal several formulæ for preparing the iodide of iron, I am induced to add one more to the number, which you will admire for the singular beauty of its color, and for its permanency; and as I have been in the habit of using some chalybeate preparations, which are not to be found in any of the Pharmacopœias, I will subjoin a few forms for the benefit of your readers, as well as for the good of the public. Previous to which, however, it may not be improper to make some observations, from the knowledge I have derived from experience, concerning the medicinal properties of a few of the chalybeate preparations now in use.

The properties of iron are well known to practitioners, therefore I need not trouble you with a long dissertation upon that head, but will bring my discourse to a compendium, "*verba conferra ad compendium,*" as Plautus says.

Iron was medicinally used by the ancients; but its effects as an internal remedy were very little understood until more modern times. It acts as a powerful tonic; increasing the general excitement, promoting the digestive powers and healthy secretions, giving a more florid hue to the blood, and augmenting, in a great degree, the energy of the muscular fibres. It answers the intentions for which it is prescribed more effectually when given in small doses, in such preparations as sit most gratefully upon the stomach, and its use long continued. The diseases in which it is used, are those which are dependent on, or attended with, a weak, languid, leucophlegmatic habit of body, as chlorosis, hysteria, dyspepsia, fluor albus, gleet, passive hæmorrhages, palsy, scrofula, rickets, and the last stage of phthisical affections; also in convalescence from almost all acute diseases. But the use of iron is contra-indicated whenever there is any inflammatory diathesis; as in this state, it is productive of heat, thirst, headache, laborious respiration, and other disturbance in the nervous system. These symptoms, as observed by Sydenham, are common at the commencement of every course of steel, even in chlorotic females; but in them such symptoms need not be attended to, as they go off in a few days.

As Cullen observes, iron, like all other metals, in its solid and entire state, is not active with respect to our bodies, without being corroded or dissolved by saline matters; so we judge it to be rendered active only by being combined with acids. It has been common enough to give the entire metal, brought by filing into a fine powder, and with very good effects, as a medicine. But this does not differ from the general rule; for there is evidently constantly present in the human stomach a quantity of acid capable of dissolving iron, which is evinced by the blackness of the stools, which appearance always presumes a previous solution of the iron in acids.

As this combination with acids is necessary, so physicians and chemists have diversified this combination a hundred ways, and the best preparations for the purpose of medicine are those which are easily soluble, and at the same time are the least disagreeable to the stomach.

With this view spirituous tinctures have been invented; but as some take up too small a quantity of iron, and others by long keeping deposit it again, so of course these are not without objection.

With respect to other preparations of iron, I have to observe, that the filings are often productive of inconvenience and a disturbance in the stomach, with fœtid eructations, from the evolution of hydrogen gas. These effects are produced in a still greater degree, by the use of even a few grains of the sulphuret of iron; sulphuretted hydrogen being given off, which acts as a poison, and consequently this preparation is not well calculated for internal purposes.

The rubigo ferri requires to be given in large doses, on account of its insolubility, and to be long persisted in; in both cases the stomach often becomes cloyed, and sickness arises before sufficient can be taken to produce the desired effect.

The subcarbonate or precipitated carbonate of the shops, is liable to the same objection, being, as I apprehend, peroxide, or mere colcothar, and but in a slight degree soluble, which is the reason why such large quantities can be occasionally taken for a dose; whereas of the carbonate of the protoxide as formed in the mist. ferri c., or in the pil. ferri c., two very useful preparations, from five to ten grains are generally as much as can be taken for a dose, without producing considerable stimulant effects.

The sulphas ferri occasionally produces pain in the bowels, nausea, and vomiting, especially if taken in improper doses, or long continued.

The most valuable preparations of iron are those which have the deutoxide for their base, as in the mineral waters, and in the formula I am about to give you:—

Liquor Oxysulphatis Ferri.—R. Ferri sulphat., ʒ ij. (or ʒ iij.); acidi nitrici, ʒ iij.; aquæ dist., ℥ iss. Tere diligenter per horæ quadrantem acidum nitricum ferro vitriolato, dein sensim addendo aquam, per chartam cola, et fiant guttæ, é quibus capiat æger gtt. v.—xij. bis in dies ex infusa quassiæ vel aquâ.

This form, I believe, was invented by Sylvester, about forty years ago, and has ever since that time been in constant use among the practitioners of Derbyshire. I wonder it has not been inserted into the Pharmacopœia, as it is by far the best and most powerful of all the preparations of iron. The oxygen of the nitric acid uniting with the sulphate of iron, forms a persulphate; at the same time the iron is converted into red oxide. As a medicine it far surpasses the tinc. ferri mur., and it never precipitates the oxide of iron. It is one of the most valuable restoratives in the debility and torpor of the liver, which remains after the successful treatment of hepatitis. Patients do not well bear above ten or twelve drops to a dose; and when given with small doses of sulphas magnesiæ, &c., it equals the purgative mineral waters. I think it will be found to be an antidote to prussic acid, as it instantly combines with it.

This form having the red oxide for its base, enables me to obtain some of the mildest, most efficacious, and beautiful of the preparations of iron.

Ferri Bitartras.—R. Ferri sulphatis, ʒ iij.; acidi nitrici, ʒ iss. Tere simul guttatim:—cessatâ effervescentiâ, adde, Aquæ font., ℥ vj.; potassæ supertart., ʒ vj. Coque, et liquorem tepidum per chartam cola; fiat sal siccum, s. a. Dose, gr. v.—xx.

The sulphate of potass here produced, adds greatly to the efficacy of the medicine, rendering it gently aperient.

Potassio-tartras Ferri.—R. Ferri sulphatis, ʒ vj.; acidi nitrici, ʒ iij. Tere simul guttatim per horæ quadrantem, et adde, Aquæ font., ℥ vj. Misce et per chartam cola, cui adde potassæ carbonat., ʒ vj.—et sepone per aliquot horas; liquorem supernatantem effunde, ex oxido precipitato adde, Bitartratis potassæ, ℥ iss.; aquæ font., ℥ viij., vel q. s. Decoque et per chartam çola:—leni calore consumatur liquor ad pulverum siccum. Dose, the same.

These two preparations dissolved in boiling water, continue in solution when cold.

Ammonio-tartras Ferri.—R. Acidi tartarici, ʒ ij.; ammoniæ carb., ʒ j.; aquæ font., ℥ vj., vel q. s. Misce fiat solutio.

R. Liq. ferri oxysulph., ℥ j.; liq. potassæ, q. s. M. Wash the precipitate with distilled water upon a filter; add the oxide, while in the state of hydrate, to the above solution, and with a gentle heat dissolve the iron, and evaporate to dryness. Vel,

R. Liq. oxysulphat. ferri, ℥ j.; potassæ subcarb., ʒ iij.; aquæ font., ℥ vj. M. The precipitated oxide to be treated as above. Dose, gr. v.—x.

Perfectly soluble in water. Contains about one grain in four of deutoxide of iron.

Here we have three preparations of tartrate of iron, which, when mixed with a due proportion of water, are remarkable for their solubility, and the beautiful golden color of the solution; hence they form elegant mixtures for medicinal purposes.

Liquor Ferri Biniodidi.—R. Potassæ hydriodat., ʒ ss.; aquæ puræ, ʒ x. Misce, et adde liq. ferri oxysulph., ʒ ij. M. Dose, gr. xx.—xxx., bis die.

This solution is of a beautifully deep-red color, and transparent. It contains, like most other iodides, a little free iodine; but retains its color, and does not part with its iron; for I have some now by me which was made six years ago, and the only deposit is a little sulphate of potass. The liquor oxysulphatis ferri is also a test for the purity of hydriodate of potash, producing in the above proportions a deep transparent solution.

In medicine, as well as in the arts, much disappointment would be avoided, and much advantage gained, in attending to the base, that is to say, to the state of oxidation of the mineral made use of; each oxide possessing essential properties, differing materially from each other. This we have already seen in the observations upon antimony and mercury; but it is more particularly evinced in the use of copper. In copper we have a valuable tonic and astringent in some cases of epilepsy, chorea and uterine hæmorrhage; but nearly all the preparations now in use are unmanageable, as they contain peroxide, which is poisonous; while the protoxide is nearly inert. Even the ammoniaret, which is the mildest of them all, still requires the greatest care, as it also contains peroxide.

PRACTICAL DENTISTRY.

FROM AN INTRODUCTORY ADDRESS BY E. PARMLY, M.D.

It being now admitted on all hands that teeth can be saved by proper operations, the public are ready to inquire, "How are we to avail ourselves of the benefits of these operations?" The answer is simple—employ skilful men. And dentists, too, inquire, "how are we to become skilful?" The answer to them is, apply yourselves to practical study under the instruction of able men, taking them and them alone as your guides and examples.

It is an easy matter to describe the best mode of performing all operations on the teeth; but it must be a hard matter to describe an operation in such a way as to enable another to take the description and go away and perform that operation.

An ingenious jeweller, possessing the greatest power of description ever inherited by man, might call around him a hundred of the most refined and best cultivated intellects that can be found in the learned professions, and describe to them the best mode of cutting a diamond and setting it in a ring, and I will venture to say that not one of the hundred would be able to make the ring and set the diamond; although one of the apprentice boys who did not understand the meaning of one half the words used in the description of the process, would at once take the materials in a rough state, and perform the task, not because his head alone, but because his hands, also, possessed the necessary cunning. And yet the difficulty of preparing the diamond and setting it on the ring, bears no just comparison with the difficulty of securing the gold in a tooth in certain cases. Hence the indispensable necessity of combining mechanical ingenuity and skill with correct professional knowledge.

In general terms I would say, then, that in stopping teeth, it is essential in all cases that the cavity which receives the gold should be made larger within, than at the orifice, or external opening, and then that the gold should be introduced with the utmost niceness and care, being made as solid by compression as the nature of the case will admit.

If the gold is good, and I am sorry to say that we are not always well served, even by the best manufacturers, the body of the stopping will be firm, and the surface will receive a polish.

When a tooth has been thus stopped, the durability of the stopping will depend on several contingencies. First, on the preparation of the cavity; second, on the ingenuity with which the gold is introduced and compressed; and third, on the character and strength of the tooth, whether it is or is not disposed to crumble around the stopping, thereby weakening its hold.

Care should be taken to go no deeper into the tooth than is absolutely necessary to remove the decay and form a cavity.

No man can form a cavity properly without proper excavating instruments. I have a set of instruments purchased from the widow of a certain medical gentleman in New York, who came out largely a few years ago, as a dentist. With these instruments I will defy the most expert operator and ingenious dentist in the world to stop a front tooth, without destroying the nerve in the operation; and it is by such men, and such instruments, that we see so many discolored and black front teeth in the mouths of young people, who have had them thus stopped.

It is a common practice when the front teeth are decayed, to file a space between them wide enough to enable the operator to get at them to fill the cavity. This method in the hands of a skilful man is generally a safe one, but for ten years past I have in many instances abandoned it, and particularly where I could do so with young people, and instead of filing, I have separated the teeth by forcing between them slips of India rubber or thin wedges of wood, which, by its expansion, causes the teeth to recede without any injury. Pursuing this course for a few days, enlarging the wedges from day to day, the cavity may be stopped. Whereupon the teeth will immediately fall back into their original position.

When this is done there is not the same danger of wounding the nerve as when the file has been used, for the reason that sometimes we are compelled to go beyond the depth of the decay, in order to get a cavity deep enough to hold a stopping, and in thus making it deep enough, in many instances, the nerve is touched, and the vitality of the tooth consequently destroyed, which would not have been the case if the plan of wedging had been adopted, for all that the file removed would have been left to form a secure hold or support for the gold.

Gold is the only substance that I recommend for a permanent stopping. Although I sometimes use tin foil, it is only where the tooth will not bear the force necessary to secure a gold stopping. In such cases, and also in a few peculiarly-shaped cavities, it being softer it answers a valuable purpose for a time, and is renewed as occasion may require.

I condemn, in the strongest terms, succedaneum, mineral paste, diamond cement, and every other vile composition in which there is a mixture of quicksilver.—*Amer. Jour. and Library of Dental Science.*

MORTALITY IN THE PRINCIPAL DISTRICTS OF ENGLAND AND WALES.

The Registrar-general has just published two tables of the mortality in 114 of the principal districts (including all the large towns) of England and Wales. The tables show the number of deaths registered in the winter and spring quarters of the present year, and throw much interesting light on the present sanatory condition of the population.

Nothing of the kind has been published in any other country, showing the mortality in such a mass of people, placed in such a variety of circumstances; and if the same talent be brought, by our medical brethren, to bear on these published data, as was applied by Willan, Bateman and Heberden, to the London bills of mortality, the results cannot fail to promote medical science, and to lead to improvements in the public health.

The returns are made by 571 registrars from every part of the kingdom, and show the mortality and prevailing epidemics up to within a month of the present date. This is a great advantage, and is obtained by a very simple machinery. We must refer to the returns for the registrars' notes.

The districts are generally more extensive than the towns of the same names.

The return gives the deaths in 114 districts (subdivided into 571 registrars' districts): 33 in the metroplis; 81 in the other divisions of the country. At the last census (June, 1841) the population of England and Wales was 15,906,829; of the 114 districts, 6,534,535, or four tenths (0.41) of the entire population of England and Wales. The annual number of deaths registered in the 114 districts was 164,772 in 1838—40, or little short of a half of the total deaths in the country.

The mortality (1838—40) was at the rate of 2.6 per cent. annually in these 114 densely-peopled districts; and it was less than 2 per cent. in the rest of the kingdom; hence the districts in the return will be the first to indicate the rise of an epidemic, or any deterioration of the public health.

The population in the 114 districts increased, from 1831 to 1841, about 1.8 per cent. annually, or nearly one fifth part in ten years.

The number of deaths in the last winter quarter was 44,479, or 410 *less than the average* of the three previous winters. It was 666 *less* than the average in the metropolis, and 256 *more* than the average in the other districts of the country. But the average was derived from a period of three years past, and the population increased in the 114 districts at the rate of about 5½ per cent. in three years; hence, if the mortality had been the same in the winter quarter of 1842 as in the three previous winters (1838, 39, 40), the deaths would have amounted to 47,433. They amounted only to 44,479, or to 2954 less than would have occurred if the rate of mortality had been uniform.

The rate of mortality was 6½ per cent. less in the winter ending March 31st, 1842, than in the winters of 1838, 39, 40.

The number of persons suffering from sickness was probably reduced in the same proportion.

It appears from the weekly tables of mortality for the *metropolis* that *hooping cough* destroyed 714 persons in the winter quarter of 1842; no other epidemic disease prevailed; 71 persons died of smallpox, 121 of scarlatina, 308 of measles, and 253 of typhus. The temperature of the season in London was one degree, and the fall of rain was 28 per cent. above the average of the ten years 1831—40. The temperature was 2½ degrees above the winter average of 1838—40.

The tables show the relative mortality of the same districts, at different times. In some towns the results may have been disturbed by emigration.

The absolute mortality in the districts can only be deduced by dividing the deaths in the three years by the estimated population in 1839.

The following are examples selected from a table which will appear in the next report.

Annual Rate of Mortality per cent. 1838—40.—Liverpool, 3.581; Manchester, 3.563; Bristol, 3.088; Leeds, 2.722; Birmingham, 2.718; Metropolis, 2.675; Brighton, 2.087; Isle of Wight, 1.647.

The number of deaths in the spring quarter (ending June 30th) was 38,190, or 6289 less than in the winter quarter immediately preceding, when 44,479 deaths were registered. The mortality has fallen 16.4 per cent.—one sixth part.

In former years the mortality was 5.7 per cent. less in the spring than in the winter quarters; hence not more than 11 per cent. of the decrease can be fairly ascribed to other causes than the temperature of the seasons.

The number of deaths in the last spring quarter was 2515 less than the average of the four preceding spring quarters (1838—41). The interval between the middle points of the two periods was 2.37 years, and in that time, at the rate of 1.74 per cent. annually, the population must have increased about 4.4 per cent. If the rate of mortality had remained the same, 42,509 deaths would have been registered. But the number of deaths was only 38,190; and the result is in accordance with that announced in the previous paragraph, that the mortality was 11 per cent. below the average of the season, deduced from the returns of the four previous years.

The returns for the whole kingdom show that the rate of mortality was high during the year 1840, and continued high during the winter of 1841; it began to decline in the spring of 1841, and continued to fall slowly through the winter of 1842, until, in the spring quarter of 1842, the mortality was, as has been already seen, 11 per cent. below the average of the four preceding spring quarters.

As a general rule, two persons are on an average *constantly sick* for one death in the year (M'Culloch's "Statistics of the British Empire—Vital Statistics"); and, according to this proportion, 305,520 were sick during the spring quarter ending June 30th, 1842. If the mortality and sickness had been the same in the 114 districts as in the previous springs, 340,072 persons would have been constantly suffering from sickness. The reduction in the average number of sick persons was therefore probably about 35,552.

In the metropolis the epidemic of *hooping cough* declined, the deaths were 402; 263 persons died of *typhus*, 195 of *scarlatina*, 59 of *small-pox*. Of measles, 334 died. The number of deaths by diseases of the epidemic class was 785 less than the average of four preceding spring quarters.

The mean temperature of spring at the apartments of the Royal Society, London, was 2.4 degrees above the average of ten years (1831—40). The fall of rain was three inches, or one third less than the average. The air was drier, and the barometer higher than usual; but rain fell on 32 days, while on an average it falls on 30 days in the season (91 days).—*London Lancet.*

NEW TREATMENT OF TUBERCULOUS CONSUMPTION.

[Dr. J. S. Campbell, Physician to the St. Marylebone General Dispensary, London, has just published a work on tuberculous consumption, comprising some new views of the nature, pathology and cure of that disease. From a notice of the work in the London Lancet, we make two separate quotations, which are all we have space for this week.]

The author then proceeds to inquire, why is tubercular matter deposited in the lung? His views on this point are quite original; he believes that a want of due proportion between the size of the morbid particles contained in the blood and the diameter of the capillaries, is the cause of the arrest of the former in the course of the circulation. In support of this view he refers to the microscopic structure already described, and to the results of injections; in illustration of the latter, several colored figures are given. These are intended to show that if in certain cases an injection consisting of vermilion and tallow be thrown into the pulmonary artery, the branches of the pulmonary vein, and even the left auricle, will be found to contain the fat deprived of the coloring particles which have been arrested in the capillaries of the lungs. This obstruction he finds proportioned to the tendency to, or existence of, a scrofulous diathesis in the individual, and hence concludes that a like arrest of the particles of tubercle present in the blood takes place in cases of pulmonary consumption.

We come next to the *treatment*. Post-mortem examinations show us the presence of tubercular disease of the lungs in innumerable cases, when we should never have been led by general symptoms to expect it; and, further, many of them show that we would be justified not merely in saying that the symptoms had ceased, but that the local disease itself had disappeared; in fact, that a perfect cure had taken place. Satisfied of the possibility of such a result, we are next led to inquire the means to so desirable an end. With this view our author endeavors,

"1. To counteract that morbid state of the digestive organs originating the matter, without which tubercles cannot be produced.

"2. To accomplish a solution of this matter, after it has passed into the blood, and thus arrest its local deposition, presumed to depend on mechanical retention in the extreme vessels of the pulmonary artery.

"3. To place and retain the patient under such circumstaces, in reference to his medical, dietetic and general treatment, as seem on rational principles best calculated to meet those evils which result from the existing state of the respiratory organs, thus affording time for removal by the natural process of softening of such tubercles as already exist."

The two first indications refer distinctly to separate stages in the pathology of the disease. Being, however, all but simultaneous in their occurrence, and to be discriminated with difficulty in practice, they are treated of together. The first object should be to prevent the formation of the diseased particles, which, entering into the constitution of the blood, become the source of tubercular deposit. With that view the symptoms of "strumous dyspepsia," or "tubercular cachexia," are carefully detailed, and the remedies, both medicinal and dietetic, fully treated of, and this in such a manner as to merit a most attentive perusal.

But the blood may have become already charged with these diseased particles, or the slow process of their deposition in the texture of the lungs may have already commenced. Our object, then, must be to devise some means for their removal.

"In reflecting," says the author, "on the remedies likely to effect an object which thus appeared of great importance, I was led to examine into the degrees of solvent power exerted towards the matter of tubercle by various substances; and, as already stated, after trying a large number of solutions, none were found which, in this respect, at all equalled the alkalies in a state of purity."

These views, supported by the previously observed effects of such remedies in external scrofula, and by the generally received opinion in the humoral schools of pathology, led Dr. Campbell to make trial of the liquor potassæ in the treatment of pulmonary consumption, and for ten years he has adopted the practice in a very large number of cases, and with such favorable results as induce him now to come before the public. He insists on giving the remedy uncombined with acid, and that to be useful it must be persevered with; the dose for an adult being from thirty to forty minims given three times a day in water or any bland fluid.

"In all cases the alkali must be employed as the fundamental part of the treatment, and whatever other means may be deemed proper to meet symptoms, or for any other reason, must not be such as to interfere with its caustic qualities."

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BOSTON LUNATIC HOSPITAL.

Dr. Butler's third annual report, submitted to the City Council in July, is now published. He has certainly had enough to do during the last twelve months. In the Lunatic Hospital there have been 148 patients; in the hospital of the House of Industry, 733; and in the hospital of the House of Correction, 415—making a grand total of 1296. There were in the Lunatic Hospital at the beginning of the year (namely, July 1, 1841), 108; admitted during the year, 40; discharged (including 17 deaths), 53; remaining at the end of the year, 95.

We cannot very conveniently republish more than a few extracts from this official document, which is creditable to the author, both in his character of physician and superintendent of the Lunatic Asylum. In speaking particularly of the insane establishment at South Boston, the report contains the following observations.

"Such are some of the results which have been effected in the Hospital. Commenced as a receptacle for the poor and incurable insane of the city, it has expanded its arrangements as the necessities of the city have demanded, and has received into the wards nearly two hundred of the most unfortunate and afflicted of our fellow beings, among whom not a few have been found intelligent, virtuous and estimable; but poor, sick and destitute—events which may come alike to all. Many have here found relief from the worst calamity of all the varied forms of disease; many have received partial relief; and many more have found, in the kindness and ready sympathy of those around them, strange and unexpected tokens of a fellow-feeling, which could bear with their infirmities, repress the excitements, and cheer the despondency, of the most friendless being on earth—the poor lunatic.

"From the same causes, the general aspect and character of our patients have continued to improve: they are far more quiet, more easily controlled, the paroxysms of excitement are less frequent and less violent, and excitement itself is less contagious: this influence pervading the Hospital, extends itself to the recent cases, and gives us a more ready ascendancy over them. Restraint, even of the simplest kind, is rarely resorted to, and would be less necessary, had we a *solitary*, in which the noisy and turbulent could be occasionally secluded, and thus prevented from disturbing and exciting others. We provide amusement and occupation for them as far as it is in our power; our sewing party is regularly attended, and is effecting much; our garden is a favorite resort; walking parties go out every pleasant day; books, newspapers and games of various sorts help to relieve the monotony of our halls. Many labor to good purpose in the laundry, kitchen, garden, grounds, &c."

It is truly gratifying to witness the progress of benevolence of feeling in those to whom the care of this wretched class of beings is confided. Those who are most conversant with the insane are uniformly agreed in regard to the system which has been adopted in all the institutions of this country, as well as in the best-managed ones of Europe. Coercion is not recognized in the code of treatment; but the asperities of diseased humanity are subdued, if at all, by an untiring practice of kind regard for the comfort and happiness of the patient. Instead of being roused to the desperation of madness by severities, privations and cruelties, which only give permanency to hallucination, and increase the wretchedness of the miserable subjects of mental maladies, their pathways are now strewn with flowers. Music and the refining influences of choice society, the beauties of art, and the soul-elevating powers of practical Christianity, are brought into requisition to mitigate the intensity of their sufferings. Such is the pauper lunatic hospital at South Boston —a place where the inmates are made comfortable in body, and, as far as possible, under the guidance of well-directed efforts, in mind also.

Speculum Ani.—No people are more fond of patent-rights, than the citizens of the United States. We are the laughing-stock of foreigners in this respect; and Mr. Hill, the comedian, has gained extensive popularity in two hemispheres, by representing and caricaturing this national weakness of our countrymen. The most trifling, and, generally speaking, unimportant modification of something of established utility, whether it belongs to the machinery of a cotton factory or to a gridiron, is too frequently claimed as a discovery, and at once secured by the great seal of the patent office. Only last week we illustrated the truth of this predominant propensity to deal in patent rights, by copying one that was recently taken out for curing the venereal disease! And here is another, both illustrative and confirmatory of the foregoing remarks. Joseph T. Pitney, of Auburn, Cayuga Co., N. Y., under date of July 23d, has secured a patent for "*an improvement in a surgical instrument, called speculum ani.*" In his claim on the condescending mercies of the commissioner, he says, "I hereby declare that I claim, as my invention, the manner in which I have formed and combined the respective parts; that is to say, I claim the forming of a speculum ani with tapering or conical blades, united at their larger ends, to forcep handles, standing at a suitable angle with the blades, to admit of the ready inspection of the parts, and furnished with a set screw to regulate the opening of the blades, by which combination and arrangement of its parts, the instrument is rendered more effective and more convenient in use, than such as have been heretofore made for the same purpose."

Surgeons must be exceedingly careful not to infringe upon the vested rights of this ingenious mechanic. He doubtless has a large organ of Hope, and sees, in the universal adoption of his speculum ani, a coach and ſour for himself, and comfortable landed estates for all his posterity.

The M'Clintock Supper.—In the Vermont Statesman is a glowing account of an entertainment given on the 15th of September at Castleton, by the medical students of the flourishing school in that place, to Dr. M'Clintock, the worthy Professor of Surgery. The company assembled "at the discharge of cannon," which must have been an imposing exhibition, and made speeches that would cause the world to stare were they written on the sky. If each one had been paid a lawyer's fee, nothing more fulsomely laudatory could have been said of each other. Either by accident or design, a poetical mine was sprung. A sentiment touching the future harvest of emoluments and honors of the present class, brought out the Marseilles hymn, which was as inappropriate as possible. However, when Professor Carr offered, "The medical class, professional talent and private worth—may you long live to reap the reward due to merit," Chevy Chase was sung! But the climacteric of egotism, which seems to have gone down with a gusto, was a toast by Mr. Leech—" Albany, Pittsfield, Woodstock and Hanover, lesser orbs that revolve around their central sun—Castleton"!! Upon which they had the beautiful Irish song of Rory O'Moore. Of all modern merry-makings, this has quite eclipsed the whole, more particularly as the discovery was made, at a happy moment, that the Castleton Medical School is the centre of medical science. Should the faculties of other institutions which have heretofore been regarded favorably by the public, feel that it is no longer an object to attempt sustaining a feeble existence against the universally engulphing influence of the Castleton giants, nothing would reflect more gloriously upon the characters of the several professors and trustees of this "central sun," than to spare their lives. None but tyrants abuse their power; and historians will not hide the virtues, any more than they will conceal the faults, of the gods, while they wear the semblance of men!

Respirators.—Paragraphic notices have appeared, from time to time, in regard to the utility of respirators in this variable climate. Physicians are convinced of the utility of the invention, and the experience of invalids, which is worth infinitely more than any man's theory, confirms us in wishing that the instrument may be afforded at a price that will enable people of moderate circumstances to have it. Dr. Bowditch, of Bedford street, with this object in view, is about having respirators manufactured, equal in all respects to those brought from England, and that will be far more reasonable in cost. His advertisement will be found in to-day's Journal. Our medical friends, by keeping this intelligence in remembrance, can direct their patients where they can select from a large collection at a reasonable rate.

Gilding Surgical Instruments.—Mr. Daniel Davis, the ingenious author of a work, alluded to a few weeks since, on the interesting subject of magnetism, has an advertisement in the Journal of to-day, to which the attention of the profession is respectfully directed. He gilds lancets, forceps, needles, scissors, canulas, and knives of all kinds, beautifully and cheaply, too. The advantages of the gilding must be obvious: they will not rust afterwards, and all know how much difficulty is ordinarily experienced in keeping them from rust. Even when forgotten after using—no uncommon circumstance—no harm comes to them, when prepared in this way, either by blood or water, or even long atmospheric exposure. Mr. Davis gilds by the newly-discovered magneto-electric process.

Anatomist's Vade Mecum.—Messrs. Lea & Blanchard have now in press, an edition of this admirable book, by Erasmus D. Wilson, lecturer on anatomy at the Middlesex Hospital Medical School. This edition is improved by notes and additions by Paul B. Goddard, M.D., who has adapted it to American practice and use, so far as it could be done. There will be one hundred and seventy illustrations. Some time the present month it may be expected on sale at the stores. In the whole range of elementary anatomical works, we know of no one of more immediate value to the student. Ever since its appearance in England, a solicitude has been expressed to have it placed within the reach of American students. It should be distributed through the country soon, if it is to subserve the interest of the medical schools this winter.

Typhoid and Typhus Fever.—A fine, large octavo volume, on the history, diagnosis and treatment of typhoid and typhus fever, with an essay on the diagnosis of bilious remittent and of yellow fever, by Elisha Bartlett, M.D., Professor of Theory and Practice of Medicine in Transylvania University, came too late to be properly noticed to-day. Next week we shall give it a more special examination.

Treatment of Small Encysted Tumors. By F. PAGE, Surgeon.—Several ingenious plans having appeared lately in your Journal upon the above subject, each of which appears to me to be more or less tedious, and having extensively practised the following very simple method for a long time past, you will excuse the liberty I have taken in forwarding it to the notice of my professional brethren—of course it applies to very small tumors, and when situated in parts where the cysts cannot be easily removed with the knife.

I first make a free incision through the tumor, then with a probe slightly bent at its sharp point, effectually remove the whole of its contents; having done so, freely apply, with the blunt point of the probe, nitric acid to the whole of the inside of the cyst, sponge the part with cold water, and you have no further trouble; sloughing takes place in two or three days, and the tumor is cured. I have removed a considerable number of small tumors from the eyelids in this manner with the greatest success; of course operating on the inside of the lids, and have never required a second operation on the same tumor.—*London Lancet.*

Medical Miscellany.—According to the last census, there are in the United States 759 persons over 100 years of age.—Dr. P. C. Spencer, of Richmond, Va., has discovered that good paper may be made of the leaves of the morus multicaulis.—Dr. Redfield, of Watertown, N. Y., says the Phrenological Journal, thinks he has discovered a system of physiognomy, founded on a connection between the phrenological organs and the various bones and muscles of the face. Combativeness gives an aquiline nose; acquisitiveness spreads it out; amativeness is manifested in a chin projecting downward and outward, &c.

Married,—At Hartford, Conn., Dr. William Hutchins, of Brooklyn, Conn., to Miss Eleanor F. Hall.—At Mansfield, Conn., Ashbel W. Barrows, M.D., of Rocky Hill, to Miss Anna Freeman.—In Philadelphia, D. H. Tucker, M.D., to Elizabeth, daughter of the Hon. George M. Dallas.—In Philadelphia, Geo. Stewart, M.D., to Miss E. J. Dunlap.

Died,—In Moorestown, N. J., of consumption, Dr. Hugh H. Higbee.

Number of deaths in Boston for the week ending Oct. 1, 56.—Males, 27; Females, 29. Stillborn, 5.

Of consumption, 5—bowel complaint, 1—cholera infantum, 2—bilious fever, 1—child-bed, 1—disease of the spine, 1—dropsy, 1—disease of the heart, 2—delirium tremens, 1—infantile, 5—inflammation of the bowels, 5—inflammation of the lungs, 1—lung fever, 1—gangrene, 1—intemperance, 2—liver complaint, 2—marasmus, 3—old age, 2—smallpox, 1—suicide, 1—sudden, 1—scrofula, 1—slow fever, 1—scarlet fever, 1—rupture of blood vessel, 1—teething, 4—typhus fever, 4—hooping cough, 1.

THE NEW ENGLAND QUARTERLY MEDICAL JOURNAL,

No. 2, for October, is just published. It contains original articles—by Dr. W. Channing, on Anhæmia; Dr. A. Twitchell, Gun-shot wound of the Face; Dr. J. Ware, on Croup; Dr. J. B. S. Jackson, on Tubercular Meningitis—with Reviews, Bibliographical Notices, Reports of the Boston Society for Medical Improvement, and Selections from other journals. Price $3 a year, in advance.

RESPIRATORS, OR BREATH-WARMING INSTRUMENTS.

The subscriber, believing, on the recommendation of the British medical faculty, and from his own experience, that Respirators are useful instruments in most thoracic diseases, has imported many of them during the past three years, and he will continue to do so. Some months since, the London agent declined sending any more of those previously sold at the lowest price. The undersigned has therefore had some manufactured under his own immediate inspection.

They may be procured at his house, 17 Bedford street, Boston; at the Infirmary for Diseases of the Lungs, 5 1-2 Tremont row; at Metcalf's apothecary shop, Tremont street; and at this office; also, at the residences of the following physicians and apothecaries:—B. F. Baker, M.D., Norwich, Ct.; A. O. Dickey, M.D., Lyme, N. H.; Mr. Hall, Apothecary, Keene, N. H.; Mr. E. Fuller, Apothecary, Augusta, Me.; James C. Ayer, Apothecary, Centre street, Lowell; Messrs. James Green & Co., Apothecaries, Worcester, Mass.; Messrs. Adamson & Olliff, Apothecaries, 6 Bowery and 699 Broadway, New York; Mr. Frederick Brown, Apothecary, corner of 5th and Chesnut streets, Philadelphia. O. 5—eop3m H. I. BOWDITCH, M.D.

MAGNETO-ELECTRIC GILDING AND SILVERING,

Done to order, by Daniel Davis, Jr., 11 Cornhill, Boston, Mass. Watches, spoons, knives, thimbles, brass or copper ornaments, of all descriptions, gilded or silvered at the lowest prices. All kinds of surgical and dental instruments gilt in the best manner, and warranted superior to any other process. Improved magneto-electric apparatus for medical purposes.

Apparatus for gilding and silvering at reasonable prices. Davis's Manual of Magnetism, 228 pages, Price 75 cents.

MED. DEPARTMENT OF THE COLUMBIAN COLL., WASHINGTON, D. C.

FACULTY.

Thomas Sewall, M. D., Professor of Pathology and the Practice of Medicine.
Harvey Lindsly, M.D., Professor of Obstetrics and the Diseases of Women and Children.
Thomas Miller, M.D., Professor of Anatomy and Physiology.
John M. Thomas, M.D., Professor of Materia Medica and Therapeutics.
Frederick Hall, M.D., LL.D., Professor of Chemistry and Pharmacy.
William P. Johnston, M.D., Professor of Surgery.
Samuel C. Smoot, M.D., Demonstrator of Anatomy.

The Lectures of this institution will commence on the first Monday in November, annually, and continue until the first of March.

The entire expense in a course of lectures by all the Professors, is $70. Dissecting ticket, $10.

Good board can be procured at from $2 50 to $3 per week. Most of the students during the last session paid but $2 50 per week.

Washington, April, 1842. July 27—eoptN1. HARVEY LINDSLY, M.D., *Dean.*

MASSACHUSETTS MEDICAL SOCIETY.

There will be a stated meeting of the Counsellors of the Massachusetts Medical Society held at the Society's room, Masonic Temple, Tremont street, on Wednesday, Oct. 5th. SAMUEL MORRILL,
Sept. 28—tm *Recording Secretary.*

JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.

Session of 1842–43.

The regular Lectures will commence on the first Monday of November.

Robley Dunglison, M.D., Professor of Institutes of Medicine and Medical Jurisprudence.
Robert M. Huston, M.D., Professor of Materia Medica and General Therapeutics.
Joseph Pancoast, M.D., Professor of General, Descriptive and Surgical Anatomy.
J. K. Mitchell, M.D., Professor of Practice of Medicine.
Thomas D. Mutter, M.D., Professor of Institutes and Practice of Surgery.
Charles D. Meigs, M.D., Professor of Obstetrics and Diseases of Women and Children.
Franklin Bache, M.D., Professor of Chemistry.

Lectures and practical illustrations will be given at the Philadelphia Hospital regularly through the course, by

Dr. Dunglison on Clinical Medicine.
Dr. Pancoast on Clinical Surgery.

On and after the first of October, the dissecting-room will be open, and the Professor of Anatomy and the Demonstrator, Dr. Jonathan M. Allen, will give their personal attendance thereto. Clinical instruction will likewise be given regularly at the Dispensary of the College. During the course, ample opportunities will be afforded to students of the school for Clinical Instruction; Professors Dunglison, Huston and Pancoast being medical officers of the Philadelphia Hospital; Professor Meigs of the Pennsylvania Hospital; and Professor Mutter, Surgeon of the Philadelphia Dispensary.

ROBERT M. HUSTON, M.D., *Dean of the Faculty.*

⁂ Boarding and other personal expenses of students are at least as cheap in Philadelphia as in any other city of the Union. Ag. 24—tO20

UNIVERSITY OF PENNSYLVANIA.—MEDICAL DEPARTMENT.

Session of 1842–43.

The Lectures will commence on Tuesday, the 1st of November, and be continued, under the following arrangement, to the middle of March ensuing.

Practice and Theory of Medicine, by - - -	**Nathaniel Chapman, M.D.**
Chemistry, by - - - - - -	**Robert Hare, M.D.**
Surgery, by - - - - - - - -	**William Gibson, M.D.**
Anatomy, by - - - - - - - -	**William E. Horner, M.D.**
Institutes of Medicine, by - - - - -	**Samuel Jackson, M.D.**
Materia Medica and Pharmacy, by - - - -	**George B. Wood, M.D.**
Obstetrics and the Diseases of Women and Children, by -	**Hugh L. Hodge, M.D.**

A course of Clinical Lectures and Demonstrations, in connection with the above, is given at the very extensive and convenient infirmary called the Philadelphia Hospital.

Clinical Medicine, by - - - - -	**W. W. Gerhard, M.D.**
Clinical Surgery, by - - - - -	**Drs. Gibson and Horner.**

Dr. Horner continues in public attendance at the said Hospital until August 1st; and as the tickets of admission are issued for one year from November 1st, they remain valid for his course, and the other service of the house, until the time expires.

Clinical instruction in medicine is also given from the 1st day of November to the 1st day of March by Dr. Wood, in the Pennsylvania Hospital, an institution which is well known as one of the finest and best conducted infirmaries in the United States.

The rooms for practical anatomy will be opened October 1st, and continued so to the end of March. They are under the charge of Paul Beck Goddard, M.D., Demonstrator, with a supervision on the part of Dr. Horner.

Copious additions to the very extensive cabinets of Anatomy, Materia Medica, Chemistry, Surgery and Obstetrics, have recently been made, and are in progress; the polity of the school being to give to its instructions, both Didactic and Clinical, a character as practical and influential as possible in imparting a sound medical education.

The Professor of Materia Medica, besides his cabinet, has an extensive and well-furnished conservatory, from which are exhibited, in the fresh and growing state, the native and exotic medicinal plants.

263 *Chestnut street, Philadelphia, August* 1, 1842. W. E. HORNER, M.D.,
Jy. 27—eoptN10 *Dean of the Medical Faculty.*

Note.—A considerable number of the distinguished graduates of the school who are in connection with the Medical Department of the Guardians of the Poor, and with the different Dispensaries and Beneficiary establishments of the city, give clinical and elementary instruction through the year, in private, and in their rounds of practice, to such gentlemen as desire it.

MASSACHUSETTS MEDICAL COLLEGE.

The Medical Lectures of Harvard University begin annually, at the Medical College in Mason street, Boston, on the first Wednesday in November, and continue four months.

The introductory Lecture is given at 12 o'clock of the above day, in the Anatomical Theatre, by the Professors in rotation.

The following are the courses of Lectures delivered in this College, with the fees annexed.

		Fees.
Anatomy and Operative Surgery, - -	**Prof. Warren** - - - - -	$15,00
Midwifery and Medical Jurisprudence, -	**Prof. Channing** - - - - -	10,00
Materia Medica, - - - - - -	**Prof. Bigelow** - - - -	10,00
Principles of Surgery and Clinical Surgery,	**Prof. Hayward** - - - - -	10,00
Chemistry, - - - - - - -	**Prof. Webster** - - - - -	15,00
Theory and Practice of Physic and Clin. Med.	**Profs. Ware and Bigelow** - - -	15,00

There is no fee for matriculation. The Hospital and Library are gratuitous. Ticket for Dissecting Room, $5,00. Board is as low as in any of our cities.

The Clinical Lectures in Medicine and Surgery are given on cases in the Massachusetts General Hospital, which are visited by the class three times a week. Surgical operations at the Hospital are frequent. An abundant opportunity is thus furnished to students for practical observation and study.

Jy 20—eptN WALTER CHANNING, Dean.